

HXR-NX3/1

Three 1/2.8-inch Exmor CMOS sensors Full HD AVCHD camcorder with 35mm full-frame format equivalent Sony G lens and 40x zoom with Clear Image Zoom, with battery pack bundle



Overview

A multi-purpose professional camcorder offering exceptional image quality and three Full HD sensors ready to **maximise your creative potential**. The HXR-NX3/1 is a professional camcorder that features three 1/2.8-inch Exmor™ CMOS sensors for outstanding image quality. Dual media slots allow simultaneous or relay recording in AVCHD 2.0 format. There are two models available: one records at a default 1080/50P (PAL Model) and the other at 1080/60P (NTSC Model). There is also a Slow & Quick Motion feature that achieves smooth 2x slow motion when recording at 25p or 50x quick motion when 1 frame per second is recorded in 50p (PAL Model) or 30p or 60x quick motion when 1 frame per second is recorded in 60p (NTSC Model). In addition to the 20x optical zoom, Clear Image Zoom with Super Resolution Technology provides an extended 40x zoom range with excellent clarity and detail and no effective pixel loss. A built-in LED light, WiFi/NFC remote control capability, and a larger 3.5 inch LCD panel for enhanced viewing add to the versatility of this multi-purpose camcorder, putting the finishing touches on an advanced system that offers unprecedented video recording freedom.

- **Original Full HD Sony sensor for impressive imagery**

The 1920x1080 full HD 3x Exmor CMOS sensors system provides a 2.07 million effective pixel count in a 16:9 aspect ratio. Red, blue, and green light are independently and accurately captured by separate image sensors, contributing to high resolution, high sensitivity, and wide dynamic range that translate to extraordinarily natural colour reproduction.

- **High performance Sony G lens with 40x zoom range.**

Provides 28.8mm (35mm full-frame format equivalent) angle of view at the wide end. 20x optical zoom plus Clear Image Zoom provides total 40x zoom range, rivaling that of optical zoom. Clear Image Zoom offers effectively no quality loss and no pixel loss, with 2M full resolution kept using Super Resolution Technology.

- **Two models offering AVCHD 2.0 1080/50p or 1080/60p recordings**

Two models recording in AVCHD 2.0 (50p) format with a high 50 fps frame rate (PAL Model) or AVCHD 2.0 (60p) format at 60 fps (NTSC Model). The camcorder can also record in DV standard definition at 50i (PAL Model) or 60i (NTSC Model).

- **Slow and quick motion options at Full HD**

2x slow motion can be easily achieved by setting the recording format to 25p and the frame rate to 50 fps (Model E32) or to 30p and the frame rate to 60 fps (Model E23). If you'd rather speed up the action the frame rate can be set to 1 fps for 50x or 60x quick motion.

- **Battery pack included**

The HXR-NX3/1 bundle comes with the NP-F770 InfoLITHIUM rechargeable battery pack, AC-VL1 battery charger and DK-415 DC power cable, making it easier to power the camera with or without fully-charged batteries.

Features

- **Original Sony lens, sensor, and LSI technology for impressive imagery**

The HXR-NX3/1 imaging advantage begins with a superb Sony G Lens that offers stunning image quality as well as a wide zoom range. Behind that lens is a 1920x1080 full HD 3x Exmor CMOS sensors system with three 1/2.8-inch sensors providing a 2.07 million effective pixel count at the 16:9 aspect ratio. Red, blue, and green light are independently captured by separate image sensors, contributing to high resolution, high sensitivity, and wide dynamic range. An advanced LSI (that includes advanced noise reduction, improved detail reproduction, and several distortion correction technologies) handles image processing and delivers notable improvements in overall image quality. Recorded images are remarkably lifelike in texture and detail.

- **40x Clear Image Zoom (20x optical zoom and 2x Clear Image Zoom)**

The high-performance Sony G Lens provided with the HXR-NX3/1 offers an expansive 28.8 mm (35mm full-frame format equivalent) angle of view at the wide end, with a 20x optical zoom range that will easily cover most shooting situations. When more reach is required, Clear Image Zoom employs Super Resolution Technology to provide image quality rivaling that of the lens's optical zoom over a 40x range.

- **Two models offering AVCHD 2.0 1080/50p or 1080/60p recordings, plus DV**

Depending on the model, HD video is recorded in AVCHD 2.0 (50p) format (PAL Model) or AVCHD 2.0 (60p) format (NTSC Model). The ability to record in 50i (PAL Model) or 60i (NTSC Model) DV format is also provided for users who prefer a DV workflow and who need to work in a DV compatible non-linear editing environment.

- **Slow & Quick Motion**

Smooth slow or quick motion with full HD quality is available without any extra processing. 2x slow motion can be easily achieved by setting the recording format to 25p and the frame rate to 50 fps (PAL Model) or to 30p and the frame rate to 60 fps (NTSC Model). If you'd rather speed up the action the frame rate can be set to 1 fps for 50x or 60x quick motion.

- **Dual media slots, Simul or Relay recording, and independent record control**

Two media slots can record in either Simul or Relay mode. Simul mode permits simultaneous recording to two memory cards, while Relay mode automatically switches recording from the first to the second memory card when the first is full. The user can set up the two Start/Stop buttons on the HXR-NX3/1, one on the grip and one on the camcorder body, to independently start and stop recording on different memory cards while recording in Simul mode.

- **Built-in LED video light***

A built-in LED video light is included just above the camcorder's built-in microphone, providing convenient illumination for a wide range of shooting situations and minimising the need to carry external lighting equipment. Illumination is approximately 200 lux/1m (approx. 800 lux/0.5m) with a beam angle of 30° and a colour temperature of approximately 5500K.

*An external microphone connected via the XLR connector may cast a shadow if used simultaneously with the built-in LED video light.

- **WiFi/NFC (Near Field Communication) with PlayMemories™ Mobile remote control***

The HXR-NX3/1 can be remotely controlled from a smartphone or tablet computer (iOS 4.3 through 7.0 or Android 2.3 through 4.3) via a WiFi connection, and recorded video files can be transferred from camcorder to smartphone in MP4 format.** One-touch authentication is also possible with smartphones that offer NFC connectivity. Remote control features include monitoring of camera material on the smartphone display, record start/stop, zoom, aperture, and touch AF. The required PlayMemories Mobile smartphone application

can be downloaded from the Google Play Store or App Store.

* WiFi operation cannot be guaranteed with all smartphones and tablet computers. ** The HXR-NX3/1 allows simultaneous MP4 + AVCHD recording except for the 1080/50P.

- **Timecode and HDMI embedded timecode output**

Timecode and user bit settings are important features for professional applications. Timecode is essential for efficient non-linear editing of live footage from multiple NXCAM camcorders. Like other Sony NXCAM camcorders, HXR-NX3/1 timecode can be reset from the supplied infrared remote control unit, and this allows multiple cameras to be reset simultaneously for easy synchronisation. For extra sync versatility, timecode and user bits can also be output via the camcorder's HDMI jack.

- **Intelligent Auto**

The Intelligent Auto* feature makes it easy to capture beautiful images in a wide variety of shooting situations. This handy feature automatically selects the optimum scene setting from three groups of ten scenes. For example, Intelligent Auto might detect that the user is walking while shooting and automatically select the "Walk" setting from the "Camera Shake" group to ensure that optimum image quality is achieved.

* Image stabilisation is automatically set to ACTIVE mode when using the iAuto feature.

- **Scene Selection**

Scene Selection provides professional users with seven presets optimised for situations likely to be encountered on assignments. For example, the Sunrise & Sunset preset instantly optimises the camcorder settings for beautiful reproduction of sunsets or sunrises. The Spotlight preset is ideal for shooting events or similar situations that involve spotlights and stage lighting.

Scene Selection is just one more way that the HXR-NX3/1 can make your job easier.

Technical Specifications

General	
● Mass	Approx. 2.21 kg, 4 lb 14 oz (with lens hood) Approx. 2.54 kg, Approx. 5lb_10oz (with lens hood, eyecup, NP-F970 battery)
● Dimensions (W x H x D)	Approx. 174.5 x 193 x 393 mm, 6_7/8 x 7_5/8 x 15_1/2 inches (with lens hood, eye piece. and protrusion)
● Power Requirements	7.2V (battery pack); 8.4V (AC Adaptor)
● Power Consumption	Approx. 6.4 W (with XLR mic while recording, EVF On, Video light Off.) Approx. 6.9 W (with XLR mic while recording, LCD monitor On, Video light Off)
● Operating Temperature	0°C to 40°C (32°F to 104°F)
● Storage Temperature	-20°C to +60°C (-4°F to +140°F)
● Battery Operating Time (Continuous Recording Time)	Approx. 410 min with NP-F770 battery (video light Off) Approx. 265 min with NP-F770 battery (video light On)
● Recording Format (Video)	HD MPEG-4 AVC/H.264 AVCHD 2.0 format compatible SD DV(AVI) MP4 MPEG-4 AVC/H.264 with MP4 wrapping
● Recording Format (Audio)	HD Linear PCM 2ch, 16bit, 48kHz / Dolby Digital 2ch, 16bit, 48kHz SD Linear PCM 2ch, 16bit, 48kHz MP4 AAC 2ch, 16bit, 48kHz
● Recording Frame Rate - PAL	HD PS(28Mbps) 1920 x 1080/50P, 16:9 FX(24Mbps) 1920 x 1080/50i, 25p, 16:9, 1280 x 720/50p, 16:9 FH(17Mbps) 1920 x 1080/50i, 25p, 16:9, 1280 x 720/50p, 16:9 HQ(9Mbps) 1440 x 1080/50p, 16:9 1280 x 720/50p, 16:9 LP(5Mbps) 1440 x 1080/50i, 16:9 SD DV(25Mbps) 720 x 576/50i, 16:9, 4:3 MP4 MP4(3.5Mbps) 1280 x 720/25p, 16:9
● Recording Frame Rate - NTSC	HD PS(28Mbps) 1920 x 1080/60P, 16:9 FX(24Mbps) 1920 x 1080/60i, 30p, 24p, 16:9, 1280 x 720/60p, 16:9 FH(17Mbps) 1920 x 1080/60i, 30p, 24p, 16:9, 1280 x 720/60p, 16:9 HQ(9Mbps) 1440 x 1080/60i, 16:9 1280 x 720/60p, 16:9 LP(5Mbps) 1440 x 1080/60i, 16:9 SD DV(25Mbps) 720 x 576/60i, 16:9, 4:3 MP4 MP4(3.5Mbps) 1280 x 720/30p, 24p, 16:9
● Recording/Playback Time	Approx.290min(SD 64GB, PS, LPCM) Approx.340min(SD 64GB, FX, LPCM) Approx.450min(SD 64GB, FH, LPCM)

Lens	
● Lens Mount	Fixed
● Zoom Ratio	20x (optical), servo/manual
● Focal Length	f=4.1 - 82.0mm equivalent to f=28.8 - 576mm on 35 mm lens(16:9) equivalent to f=35.2 - 705mm on 35 mm lens(4:3)
● Iris	F1.6 - F11 auto/manual selectable
● Focus	AF/MF selectable, 10 mm to ∞ (Wide), 800 mm to ∞ (Tele)
● Image Stabilizer	ON/OFF selectable, shift lens

● Filter Diameter	M72 mm
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Camera Section	
● Imaging Device (Type)	3-chips 1/2.8 type "Exmor" CMOS Sensor
● Imaging Device (Pixel Count)	2.41M (total), 2.07M (effective)
● Built-in Optical Filters	OFF: Clear, 1: 1/4ND, 2: 1/16ND, 3: 1/64ND
● Minimum Illumination	PAL Model: 50i : 1.0lux(1/25 Shutter Speed, iris/gain Auto) 50i : 0.5lux(1/25 Shutter Speed, iris Auto, gain 30dB) NTSC Model: 60i : 1.2lux(1/30 Shutter Speed, iris/gain Auto) 60i : 0.4lux(1/30 Shutter Speed, iris Auto, gain 30dB)
● Shutter Speed	PAL Model: 1/3 sec to 1/10,000 sec NTSC Model: 1/4 sec to 1/10,000 sec
● Slow & Quick Motion Function	PAL Model: 1080p: Frame rate selectable 1,2,3,6,12,25,50 fps NTSC Model: 1080p: Frame rate selectable 1,2,4,8,15,30,60 fps
● White Balance	Preset(Outdoor:5600K), A, B
● Gain	-6, -3, 0, 3, 6, 9, 12,15, 18, 21, 24, 27, 30 dB, AGC
● Gamma Curve	Selectable

Input/Output	
● Audio Input	XLR-type 3-pin (female) (x2), line/mic/mic +48 V selectable
● Composite Output	BNC (x1), PAL
● Audio Output	RCA pin
● USB	mini-AB USB2.0 Hi-speed/mass-storage/Host
● Headphone Output	Stereo mini jack ϕ 3.5mm (x1)
● Speaker Output	Monaural
● DC Input	DC jack
● Remote	Stereo mini mini jack ϕ 2.5mm (x1)
● HDMI Output	Type A (x1)

Monitoring	
● Viewfinder	0.45 type color LCD: 852 X 3[RGB] X 480 equivalent, 16:9
● Built-in LCD Monitor	3.5-inch type color LCD monitor: approx. 921000 effective pixels, 640 (H) x 3 (RGB) x 480 (V), 16:9

Built-in Microphone	
● Built-in Microphone	Omni-directional stereo electret condenser microphone.

Media	
● Type	Memory Stick Duo™ and SD/SDHC/SDXC compatible x1 SD/SDHC/SDXC x1

Built-in LED Light	
● Luminous intensity	1.0m / Approx.200 lx, 0.5m / Approx.800lx
● Lighting angle	Approx. 30°

● Color temperature	Approx. 5,500K
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WiFi	
● Supported format	IEEE 802.11 b/g/n
● Frequency band	2.4 GHz bandwidth
● Security	WEP/WPA-PSK/WPA2-PSK
● NFC	NFC Forum Type 3 Tagcompliant

Supplied Accessories	
● Supplied Accessories	Lens hood (1), Pre-installed to the Camcorder EVF eyecup (1) AC-VL1 Clock Lithium (Installed) Charger (1) NP-F770 InfoLITHIUM rechargeable battery pack (1) DK-415 Connecting cord (1) Infrared Remote Commander (1) Lithium battery (CR2025 for the IR Remote Commander) (1) CD-ROM Operating instructions in PDF (1) Operating instructions (1) AC-L100C AC adaptor (1) AC Cable (1) COLD SHOE KIT(1) warranty (1)

Accessories

Analogue Portable Microphone Packages



UWP-V1

Belt-pack UWP wireless microphone package

Batteries and Power Supplies



2NP-F970/B

Info-Lithium Battery Twin Pack



ACC-L1BP

AC adaptor/charger and battery kit

Cases



LCS-BP1BP

Soft Backpack Style Carrying Case



LCS-G1BP

Lenses and Lens Adaptors



RM-1BP

LANC Remote Commander

Shotgun



ECM-673

Short Shotgun Electret Condenser Microphone.



ECM-MS2

Tripods and Supports



VCT-PG11RMB

Tripod



VCT-SP2BP

Multi-function Camcorder Shoulder Support



VCL-HG0872K

Wide Conversion Lens

Remote Controls